What is claimed is:

1. A fuel injection control system for an internal combustion engine, the internal combustion engine including an intake pipe equipped with a throttle valve, an upstream fuel injection valve provided upstream from the throttle valve, and a downstream fuel injection valve provided downstream from the throttle valve, said fuel injection control system comprising:

means for controlling a fuel injection quantity of each of the fuel injection valves on the basis of plural parameters including a throttle opening and engine speed; and

means for detecting an accelerated driving state to increase and correct the quantity of injection fuel,

wherein said increase in quantity and correction increases the injection quantity of said downstream fuel injection valve.

2. The fuel injection control system for an internal combustion engine according to claim 1, wherein said means for controlling the fuel injection quantity of each of the fuel injection valves further comprises means for determining a total injection quantity of the fuel injection valves and means for determining an injection rate of each of the fuel injection valves on the basis of the throttle opening and the engine speed.

3. The fuel injection control system for an internal combustion engine according to claim 2, wherein said means for controlling the fuel injection quantity of each of the fuel injection valves further comprises means for calculating a total correction factor Ktotal on the basis of plural parameters including manifold air pressure, intake temperature and cooling water temperature.

4. The fuel injection control system for an internal combustion engine according to claim 3, wherein said means for calculating a total correction factor Ktotal calculates a manifold pressure correction factor Kpb, an intake temperature correction factor Kta and a cooling water temperature correction factor Ktw on the basis of the manifold air pressure, the intake temperature and the cooling water temperature, respectively, said total correction factor Ktotal being calculated by integrating the manifold correction factor Kpb, the intake temperature correction factor Kta and a cooling water temperature correction factor Ktw.

5. The fuel injection control system for an internal combustion engine according to claim 1, wherein said means for controlling the fuel injection quantity of each of the fuel injection valves further comprises means for determining an injection quantity of the fuel injection valves, said means for determining the quantity of the fuel injection valves including means for determining an injection quantity of the upstream fuel injection valve and means for determining an injection quantity of the downstream fuel injection valve.

6. A method of fuel injection for an internal combustion engine, the internal combustion engine including an intake pipe equipped with a throttle valve, an upstream fuel injection valve provided upstream from the throttle valve, and a downstream fuel injection valve provided downstream from the throttle valve, said method comprising the steps of:

controlling a fuel injection quantity of each of the fuel injection valves on the basis of plural parameters including a throttle opening and engine speed; and

detecting an accelerated driving state to increase and correct the quantity of injection fuel,

wherein said increase in quantity and correction increases the injection quantity of said downstream fuel injection valve.

7. The method according to claim 6, wherein said step of controlling the fuel injection quantity of each of the fuel injection valves further comprises the steps of determining a total injection quantity of the fuel injection valves and determining an injection rate of each of the fuel injection valves on the basis of the throttle opening and the engine speed.

8. The method according to claim 7, wherein said step of controlling the fuel injection quantity of each of the fuel injection valves further comprises the step of calculating a total correction factor Ktotal on the basis of plural parameters including manifold air pressure, intake temperature and cooling water temperature.

9. The method according to claim 8, wherein said step of calculating a total correction factor Ktotal calculates a manifold pressure correction factor Kpb, an intake temperature correction factor Kta and a cooling water temperature correction factor Ktw on the basis of the manifold air pressure, the intake temperature and the cooling water temperature, respectively, said total correction factor Ktotal being calculated by integrating the manifold correction factor Kpb, the intake temperature correction factor Kta and a cooling water temperature correction factor Ktw.

10. The method according to claim 5, wherein said step of controlling the fuel injection quantity of each of the fuel injection valves further comprises the step of determining an injection quantity of the fuel injection valves, said step of determining the quantity of the fuel injection valves including the steps of determining an injection

quantity of the upstream fuel injection valve and determining an injection quantity of the downstream fuel injection valve.

11. A fuel injection control system for an internal combustion engine, the internal combustion engine including an intake pipe equipped with a throttle valve, an upstream fuel injection valve provided upstream from the throttle valve, and a downstream fuel injection valve provided downstream from the throttle valve, said fuel injection control system comprising:

a total injection quantity determination unit for determining a total injection quantity of fuel to be injected from each of the fuel injection valves;

an injection rate determination unit for determining an injection rate of each of the fuel injection valves;

an injection quantity correction unit for increasing and correcting the injection quantity of the downstream fuel injection valve during acceleration of the engine.

12. The fuel injection control system for an internal combustion engine according to claim 11, further comprising a correction factor calculation unit for calculating a total correction factor Ktotal on the basis of plural parameters including manifold air pressure, intake temperature and cooling water temperature.

13. The fuel injection control system for an internal combustion engine according to claim 12, wherein said correction factor calculation unit calculates a manifold pressure correction factor Kpb, an intake temperature correction factor Kta and a cooling water temperature correction factor Ktw on the basis of the manifold air pressure, the intake temperature and the cooling water temperature, respectively, said total correction factor Ktotal being calculated by integrating the manifold correction

factor Kpb, the intake temperature correction factor Kta and a cooling water temperature correction factor Ktw.

14. The fuel injection control system for an internal combustion engine according to claim 11, further comprises an injection quantity determination unit including a downstream injection quantity determination unit and an upstream injection quantity determination unit.

15. The fuel injection control system for an internal combustion engine according to claim 14, wherein said upstream injection quantity determination unit determines an injection quantity of the upstream injection valve on the basis of the injection rate of the upstream fuel injection valve and the total injection quantity, and said downstream injection quantity determination unit determines an injection quantity of the downstream fuel injection valve on the basis of the upstream injection quantity and the and the total injection quantity.